



Sustainable Public Procurement in Urban Administrations in China –

An action under EuropeAid's SWITCH-Asia Programme

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Advancing Sustainable Public Procurement in Urban China

Policy Recommendations

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Project Outline

The project Sustainable Public Procurement in Urban Administrations in China (SuPP-Urb China) aims at adapting and using sustainable public procurement standards in municipal Public Procurement Centres in Tianjin, Qinhuangdao and Lanzhou and at mainstreaming its application in China. The project contributes to reduced resource consumption and emissions. Thus, it supports achieving the environmental targets of China's 11th five-year plan and fosters sustainable consumption at the city level.

In September 2006, China's Ministry of Finance and the State Environmental Protection Administration (now the Ministry for Environmental Protection) issued a directive promoting green public procurement, which is accompanied by a frequently updated "green purchasing list" of eco-friendly products and producers. Supposedly the listed products should receive priority in public procurement, but in reality, implementation at the local level can still be improved. The project addresses this challenge by providing assistance with the design and implementation of sustainable public procurement (SPP). The project activities are:

- Project preparation and good practice
- Screening and framework conditions for SPP
- Implementation of SPP in three target cities
- Dissemination in China and Asia
- National Policy Dialogue

The consortium is led by the Wuppertal Institute for Climate, Environment and Energy. Local partners from Qinhuangdao, Tianjin and Lanzhou implement public procurement. The Environmental Management College of China, Nankai University, Lanzhou Environmental Protection Bureau and the UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production support the cities in their implementation activities.

For further information please visit: www.emcc.cn/supp-urb.com

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Executive Summary

Public procurement is an important element of China's public policy and market development. Through Sustainable Public Procurement (SPP)—i.e. the integration of social and environmental criteria in the public procurement process—it can also play a major role for the enhancement of environmental awareness and the turn towards a sustainable development of economy and society. Because of its multiple and partly conflicting goals the successful implementation of SPP is however dependent on a viable legal and regulatory framework and the further development of local capacity.

The project Sustainable Public Procurement in Urban Administrations in China (SuPP-Urb China) funded by EuropeAid's SWITCH-Asia Programme looked into the implementation of SPP in three Chinese cities for a period of three years. Chinese and European partners jointly analysed potentials and challenges and worked towards the provision of best practices for scaling up in China and beyond. In this policy recommendation some of the major findings based on the project are introduced and linked to the bigger picture of SPP development in China.

The national policy framework for public procurement in China is well established. It provides a promising basis for the further enhancement of the public procurement system and in particular for fostering SPP. In general, the Chinese public procurement system can be described as a hierarchical and centralised multi-level system, which is characterized by its top-down structure. The national government formulates the policy framework for public procurement. Based on this national framework, sub-central government bodies undertake the actual budget allocation for carrying out public procurement, specification and customisation of regulations, as well as training of procurement officers. Public Procurement Centres (PPCs) are responsible for implementing the directives through public procurement plans. Approaches for the improvement of SPP and its policy framework have to take this structure into consideration.

At present, the major policy instrument for the implementation of SPP in China are two public procurement lists with environmentally friendly and energy efficient products that have to be prioritised by the PPCs in their SPP work. These lists play a crucial role for raising awareness of sustainable production and consumption among the actors of public procurement. However, the implementation of national directives such as these lists strongly depends on local structural and institutional conditions under which SPP is being conducted.

Particularly Public Procurement Centres are pivotal for the success of SPP policy. Barriers and opportunities of existing laws and regulations can therefore be best observed on this level of SPP governance. Structural and regional differences such as the capacity within and resources of Public Procurement Centres, local political economy and the central-coastal divide are reasons for selective policy implementation. In order to support the implementation of high-level SPP in all parts of China the regulatory and policy framework for SPP has to be enhanced.

In the short term, the national procurement lists of green and energy-efficient products may be further revised and strengthened in order to reach their full potential. Namely, the quality and performance standard of environmental products could be improved and the product range included in the lists could be widened. In the mid to long-term, government may move beyond

predefined product lists. A potential new design could include specifying only obligatory environmental criteria or benchmarks, but not concrete manufacturers.

Additional measures to improve the rate of SPP may include the introduction of life cycle costing of all products in order to reveal the true costs over the lifetime of the product. This could at least partially overcome the cost discrepancy between green and standard products, which often leads to the purchase of less environmentally friendly products.

The above suggestions need to form part of an integrated policy package, which takes the multiple levels of SPP governance into account and which offers standards for the translation of national directives into practical use-oriented guidelines. To be successful, such a policy package will also have to include a strong capacity building component.

Central government may provide a national capacity building programme for public procurement centres on issues such as life cycle costing, technical aspects of SPP tendering, information management, product assessment and social criteria. An information and knowledge platform on the evaluation and experience of SPP approaches would further enable mutual learning among public procurement practitioners. As local-based Public Procurement Centres are responsible for the implementation of SPP, a national capacity building programme has to be supplemented by internal capacity building campaigns.

A national monitoring and evaluation system should accompany these efforts and ensure a consecutive track record of SPP in China. For all this, the experience from the three project cities and the capacity developed among the partners can be valuable resources to draw upon in the future.

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1. Introduction

Public procurement is a highly relevant policy instrument in many countries: if combined, the purchasing power of all state agencies can exceed the capacities of the biggest private players by far. When utilising this huge lever, governments can incentivise the market without directly regulating market actors. For two reasons this is particularly relevant in China: first, liberalisation continues and direct state intervention decreases respectively; second China still has an immense state-owned industry sector and government apparatus. As a consequence, public procurement is a critical element of China's public policy and market development—including the field of sustainable development. Here, state consumption can raise public awareness for environmental protection and social issues; promote green consumption and push industries towards cleaner production, technological innovation and improved working conditions. The respective integration of social and environmental criteria in the public procurement process is generally referred to as sustainable public procurement (SPP).

Learning about the potentials of public procurement, governments often try using it to simultaneously realise a variety of goals. However, while traditional public procurement is mostly based on economic determinants such as cost-efficiency and the maximisation of value for money, SPP is characterised by multiple goals and objectives (social, ecological, economic). This offers great opportunities for balanced economic development and consumption patterns but also generates conflicts of interest and other barriers towards successful implementation: tapping the potentials of SPP comes at the costs of higher complexity in monitoring and facilitation. Hence, legal measures and an adequate policy framework are crucial for the successful integration of social and ecological criteria in the procurement process.

The aim of this paper is to transfer experiences from three years of implementation experience in China into policy recommendations for the improvement of the legal and regulatory framework for SPP in China. Experiences were gained in the project Sustainable Public Procurement in Urban Administrations in China (SuPP-Urb)—an action coordinated by the Wuppertal Institute under EuropeAid's SWITCH-Asia Programme. The project aimed to analyse and improve sustainable public procurement standards in the Public Procurement Centres (PPC) in Tianjin, Qinhuangdao and Lanzhou, and to mainstream their application in China.¹

By elaborating policy recommendations based on practical experiences, the paper intends to inform the currently ongoing national evaluation process of public procurement in China², in

¹ The SuPP-Urb project selected the government procurement sector as a central theme. This comprises a part of what is called public procurement in Europe, namely regular purchases by government bodies and institutions. It does not cover single projects e.g. in infrastructure development or purchases by state-owned enterprises (SOEs) (EUCCC, 2011, p. 7). The focus of the action was on sustainable public procurement of product groups and services, which have a particularly high potential for environmental improvements, in particular for energy and water savings. Relevant product groups were office consumables (paper, detergents); electronics (computers, printers); white goods (fridges, dish washers); air conditioning, cooling facilities, heaters and office furniture.

² Prof. Zhang Mingshun from the SuPP-Urb project has been invited to participate in China's National Evaluation Project on GPP as a member of the expert committee (MEC). The evaluation project is funded by the Government Offices Administration of the State Council. The purpose of the project is to evaluate the implementation of the

which Prof. Zhang Mingshun of the SuppUrb project participates as an advisor. The national SPP evaluation programme aims at evaluating the current policies, their implementation and at formulating the next five year national SPP Plan.

At the moment of writing, the majority of laws and directives on SPP in China centre on the environmental dimension of sustainability and, hence, on the integration of “green” criteria into the public procurement process—also called green public procurement (GPP). Social criteria do not feature prominently in procurement legislation or policies yet, but lessons learned from the integration of environmental criteria into public procurement can also inform the advancement of social procurement in China.

The next chapter introduces the background of implementing SPP in the project cities. It focuses on the municipal level and relates it to the national procurement system. Chapter 3 then summarises opportunities and challenges of the prevailing SPP system from the perspective of the project, before chapter 4 identifies policy recommendations. Chapter 5 concludes the paper.

national product lists (energy efficiency products and environmentally friendly products), to identify barriers of GPP at the policy level, technical level and operational level, to identify supporting measures of GPP, to gather experiences from GPP practitioners on its improvement and to support the Chinese government in formulating a national GPP plan. The SuPP-Urb project has established a close contact with the national evaluation project. It participates in the national project by contributing to the development of an evaluation methodology, by delivering its project results and experiences, by providing SuPP-Urb cases to the national evaluation programme and by contributing to the final report of the national evaluation project.

2. SPP in Urban China

This chapter provides an introduction to the Chinese public procurement system and its regulatory and legal framework. To start with, the main actors and directives in relation to public procurement on the national level are described. Based on this national framework, the local—in particular urban—implementation and respective actors of SPP are introduced. The chapter finishes with a portrayal of the SuPP-Urb project as a practical, local approach towards the integration of environmental criteria into public procurement. The focus hereby lies on policy-related project experiences, which function as the background for policy recommendations in this paper.

2.1. National Framework

„In the mid-1990s, ecological modernization concepts such as GGP³ began to spread to developing countries, particularly in East and Southeast Asia, as these regions began to industrialize and modernize rapidly.“ (Geng & Doberstein, 2008)

The national framework for SPP consists of two systems: one is the bureaucratic organisation of procurement planning and implementation; the second comprises the existing central regulation in the field of public procurement in China. Along with the Chinese central government paying increased attention to environmental protection and sustainable development, a series of laws and regulations for the promotion of SPP were formulated.

Actors and their interaction

The central government provides the framework for public procurement in China. However, the actual budget allocation for carrying out public procurement, specification and customisation of regulations as well as training of procurement officers is the domain of sub-central government bodies.

At the national level, the National Development and Reform Commission (NDRC)⁴, the Ministry of Commerce (MOFCOM)⁵ and the Ministry of Finance (MOF) are providing leadership and governance for public procurement. Thus, they are also responsible for formulating legal directives, laws and guidelines for the strategic development of SPP in China. In addition, several other ministries issue qualifications and certifications that can influence procurement decisions (EUCCC, 2011, p. 11).

The local procurement bureaucracy fulfils two functions: one involves local policy-making, strategizing and monitoring; the second function consists of centralised management of actual procurement processes. Such centralised public procurement comprises all purchases for public service units like municipal administrations, public institutes, universities and hospitals and state-owned enterprises (Philipps, Marsille, Schröder & Haberland, 2011).

³ Green Government Procurement

⁴ Formerly: State Development Planning Commission (SDPC).

⁵ Formerly: the Ministry of Foreign Trade and Economic Cooperation (MOFTEC).

Local standards can enhance central law but must stay within the boundary of central regulation. Due to this top-down structure, the Chinese public procurement system can be characterised as a hierarchical and centralised multi-level system. The analysis of policy instruments and recommendations for their improvement has to take these structural characteristics into account. Figure 2.1 visualises the main actors involved in sustainable government procurement at the urban level.

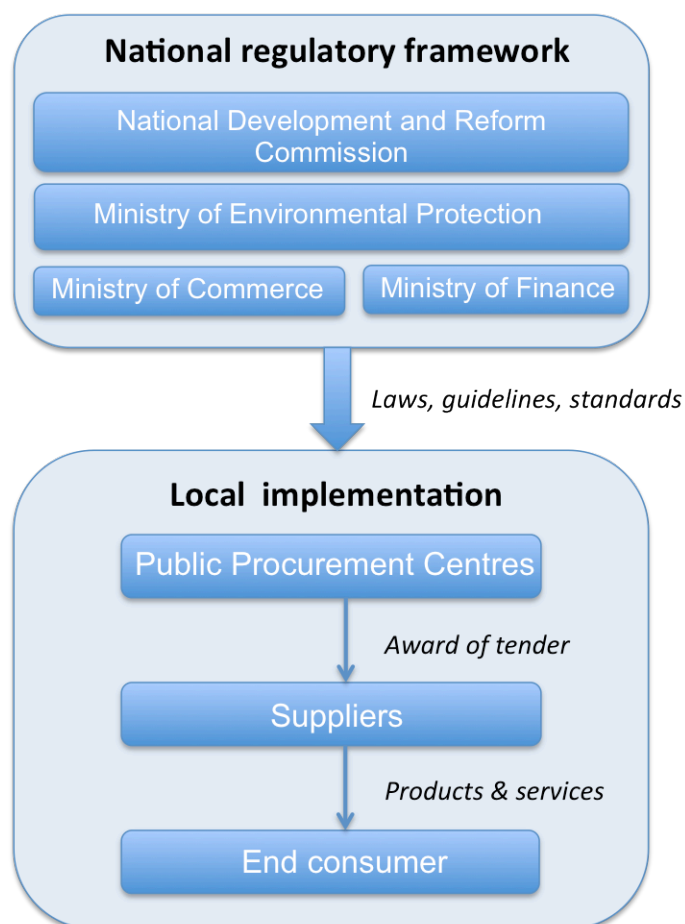


Fig.1 Actors in the Chinese public procurement system

Laws and directives

As an underlying characteristic of policy making in China (Lieberthal & Lampton, 1992) central policies tend to be rather vague and demand for local specification. This often results in diverging standards or prices across China. In the case of sustainable public procurement, such a divergence could mean a loss in controllability and policy impact. The Chinese national SPP system addresses these challenges by combining central laws with specific prioritised product lists.

China's *Bidding Law* (BL) from 1999 (PRC, 1999), the *Government Procurement Law* (GPL) promulgated in 2003 (PRC, 2002a) and the *Promotion Law on Cleaner Production* (2002) are the legal basis of the Chinese public procurement system and for the implementation of SPP. The GPL is the central piece of legislation when it comes to the field of government procurement in the focus of the SuPP-Urb project. The BL, on the other hand, regulates procurement by state-

owned enterprises and for stand-alone infrastructure projects. In article 9 of the GPL secondary objectives of government procurement—beyond value for money and cost-efficiency—are specified:

Government procurement shall be conducted in such a manner as to facilitate achievement of the goals designed by State policies for economic and social development, including but not limited to environmental protection, assistance to underdeveloped or ethnic minority areas, and promotion of the growth of small and medium-sized enterprises.” (PRC, 2002b, para. 9)

The GPL itself, however, does not offer any binding guidance on how to prioritise conflicting secondary objectives and how to relate them to the primary objectives. Nevertheless, instead of leaving the specification decision to sub-central levels, concrete mechanisms were introduced on how to evaluate market information: two lists with environmental friendly and energy efficient products serve as the main components of the SPP policy strategy (see box). They specify exactly, which products should be preferentially purchased. In 2005, the Ministry of Finance and the National Development and Reform Commission formally released the *Public Procurement List of Energy-Saving Products* (NDRC & MOF, 2011). In 2006, the Ministry of Finance and the State Environmental Protection Administration (now the Ministry of Environmental Protection) released the *Public Procurement List of Environmental Labelling Products* (MEP & MOF, 2011). Products on these lists are selected according to criteria described by the *Environmental Labelling Certification* and the *China Energy Label*. The central government adjusts both lists bi-annually in order to update the products included on the lists and to provide technical support for SPP implementation.

The environmental friendly and energy efficient product lists

At present the 8th version of the *Public Procurement List of Environmental Labelling Products* and the 10th version of the *Public Procurement List of Energy Saving Products* are valid in China. Each list provides detailed information on environmental friendly and energy efficient products, such as the name of the producer, registered trademarks, the product name and model, the number and expiration as well as validity date of the certification. The lists include the following products:

- *Public Procurement List of Environmental Labelling Products*: 21 categories of products, such as light vehicle, photocopier, computer, water-based paint, furniture, etc.
- *Public Procurement List of Energy Saving Products*: 27 categories of energy saving products, such as air conditioner, refrigerator, lighting product, television set, electric water heater, computer, printer, monitor, etc. and 7 categories of water saving products, such as toilet, faucet, shower etc.

Governmental agencies at all levels, institutions and organisations, which use public funds for procurement should give priority to purchase products on the two public procurement lists. The departments, which disobey the regulation, may be punished according to the relevant laws and regulations. Sanctions may include the retention of procurement funds by the Financial Department or the forced reorganisation of the tendering process of the relevant PPCs.

The list-based system was further developed in October 2007 when the Standing Committee of the 10th National People's Congress adopted the revised *Energy Saving Law*, to improve the system of the energy saving products list and environment labelling products. The law promotes labelling and certification and an increasing share of energy-saving products and environmental labelling products in public procurement. It demands the establishment of public procurement

assessment and supervision systems and the implementation of further measures. In doing so, the central government underlined the challenges related to centrally managing SPP.

2.2. SPP in urban administrations

National policies and laws—such as the sustainable public procurement lists—provide general guidelines for the SPP process. However, implementation heavily depends on local specification and adaptation in the way of formal regulations and informal procedures. The results differ regionally due to structural and institutional differences in the provinces of China. This was also supported by experience gained during implementation of SuPP-Urb in three different provinces. In order to improve independence of procurement agents and streamline procurement procedures nationwide, in 1999 the central government requested all sub-central levels to establish independent procurement bureaucracies:

“No procuring agency may be subordinate to any government department or have other relationship of interest with it.” (PRC, 2002b, para. 60)

As a result, procurement agents formerly part of the respective subordinate of the Ministry of Finance gained more freedom to manage their budget and institutionalise procurement procedures. At least in bigger cities, the procurement bureaucracy is further divided into two bodies with hierarchical relations: the procurement bureau (PPB) is responsible for developing local regulations and representing bureaucratic interests towards other institutions on city-level and superior bureaucratic units on province or central level. The public procurement centre (PPC) takes care of managing the actual procurement process for all administrative units, hospitals and universities belonging to the respective administration. This centralisation allows for the specialisation and development of expertise and allows for economies of scale. The PPC is subordinated to the bureau, but—depending on the respective relations—can have remarkable freedom when it comes to developing procedures for internal management, as well as communication with users and suppliers. In absence of a public procurement bureau the PPC is also involved in regulation and directly subordinated to the city government. Altogether, the structure of urban-level procurement systems lays a sound basis for initiatives in the field of SPP. In the end, the success of respective policies depends on the performance of local PPCs. However, the support of additional actors remains vital. First, the city government with the mayor can encourage or discourage SPP in various ways; second, the local finance bureau can limit or enhance SPP opportunities when allocating respective budgets.

The PPCs function as procuring intermediaries and therefore do not directly receive budgets for sustainable public procurement from the local financial departments. Firstly, the budgets are allocated to the public procurers. The PPCs formulate guiding principles and organise and implement the public procurement process. Therefore PPCs enjoy rights and undertake obligations in supervising public procurers to spend their sustainable procurement budget.

2.3. The SuPP-Urb project experience

As the description of main actors in the Chinese public procurement system and their interaction has shown, PPCs are the pivotal point for successful implementation of SPP strategies. Within the national procurement system they are both subject to top-down enforcement of procurement lists and responsible for specifying the rather vague national laws. Barriers and opportunities of SPP policy are hence best observed on this level of action. However, there are rarely any studies providing a systematic assessment of SPP on city level that explicitly consider the local context. This paper can therefore enhance the discourse and provide valuable lessons learned from the local application of SPP in three PPCs in urban areas in China, namely the municipalities of Tianjin, Qinhuangdao and Lanzhou.

Building on general existing analyses (Geng & Doberstein, 2008; Liu & Li, 2006), the focus in the SuPP-Urb project lies on the barriers and drivers of practical implementation of SPP strategies in the context of the contemporary legal and regulatory public procurement system. The project aimed to adapt and to use sustainable public procurement standards and to mainstream their application in China. Of particular interest were challenges that the strengthening of SPP brings about with regard to information needs, local capacity and embedment in local systems in the three cities.

Structural and regional differences—related to the PPC's capacity, local political economy, the central-coastal divide and so forth—are reasons for selective policy implementation. National SPP directives and regulations therefore have to be analysed in their local context. The project PPCs reflects the different regional and structural characteristics under which public procurement in urban municipalities is being conducted in China: Lanzhou is an industrial city and the capital of Gansu, a Western province; Qinhuangdao is a prefecture-level city in the developed coastal area of Hebei; and Tianjin is a highly developed provincial-level city, i.e. directly under the State Council. By basing the research on these different contexts, the project aimed to obtain a more representative assessment of current SPP policy instruments.

Looking at the project cities, PPC capacities differ as well as local politico-economic contexts and local government agendas and budgets.

Being located in the immediate vicinity of Beijing, Tianjin strives to develop its own profile. Latest with hosting climate negotiations in 2010, greening the city as well as its public consumption has become a focal strategy. Since it is part of a province-level government, the Tianjin PPC enjoys the benefits of direct communication with the central procurement bureaucracy. Tianjin PPC also upholds an intensive exchange with policy makers, and representatives from government and Tianjin PPC meet on a regular basis. Tianjin PPC is further characterised by a relatively young team, open to innovative approaches. PPC capacities are already relatively strong and enhanced by cooperation with Nankai University. Tianjin PPC has already placed a proposal to cooperate with Nankai University on calculating life cycle costs, and they will carry out life cycle costing for the next procurement of cars.

Qinhuangdao's government aims at further developing the city's tourism sector and, therefore, has vital interest in a greener environment. The city government aims at avoiding any major production activities with negative impacts on the environment and cancelled several industrial

projects due to unsustainability. In order to raise awareness for sustainable production and consumption, several measures have been implemented: 1) a communication programme with support of mass media, 2) phase-out programmes of unsustainable production by the local government, 3) demonstration projects on sustainable production by the local government (those demonstration projects are funded by local government aiming at promoting cleaner production at the local target companies). However, a constraining factor for SPP in Qinhuangdao is that the budget restraints are tighter and capacity is more limited in Qinhuangdao in comparison to the other target cities.

While Qinhuangdao is located in the vicinity of developed centres like Beijing and Tianjin, Lanzhou is spatially more isolated with less access to product markets, skilled personnel and exchange. In addition, the developmental dimension of government procurement and the budget size on the side of users is lower than in Tianjin and Qinhuangdao. Embedment in local politico-economic systems differs, too. Understanding of SPP and environmental awareness could be improved: The purchasing units are responsible for setting up the technical requirements for the products they want to buy; therefore, their environmental awareness has a major influence. At the same time procurement personnel is not as well trained and often lacks the expertise to easily identify which are environmentally friendly products.

Direct impacts measured throughout the project seem to support this divergence among the target cities (see table 1).

Tab. 1: The SPP implementation results in the three target cities 2010

Unit City	Total Procure- ment 10,000 CNY	Total SPP 10,000 CNY	SPP Rate %	Electrici- ty saved 10,000 kWh	Water saved 1 tonne	Oil saved 1,000 L	Waste reduced 1 tonne	CO ₂ reduced 1 tonne
Tianjin	80,448	69,318	86%	1,764	30,520	10,758	31,011	88,345
Lanzhou	4,696	4,311	92%	89	2,302	932	1,618	5,715
Qinhuang- dao	9,869	7,869	80%	183	6,447	2,318	1,790	11,689
Total	95,013	81,498	86%	2,036	39,269	14,008	34,418	105,749

Source: Results of monitoring as part of the Supp-Urb project activities.

3. Challenges and opportunities for SPP in China

Sustainable public procurement can be a highly relevant trigger for sustainable development: it can drive sustainable innovation and directly reduce resource consumption and emissions; in addition, state agencies can serve as role models for private consumers, and for suppliers supplying the state can be a status symbol in business-to-business and business-to-consumer markets. Further effects of sustainable public procurement include an increase in availability of sustainable products and environmental awareness among parts of the society. All this makes SPP an interesting policy option for optimising the decentralised systems of a market economy.

It is not that easy, however. How can diverse national goals be merged in the design of a single policy instrument? How can local bureaucracies with limited capacity customise national regulation for optimised fulfilment of soft targets at the local level? And, how can the central government enforce national objectives against diverging local interest? In this chapter, challenges and opportunities for all three dimensions are briefly described in preparation of policy recommendations in the last chapter.

3.1. The national level

Activities under the SuPP-Urb project allow for a Chinese perspective on the national sustainable public procurement framework. Project experience underlines that the national government confronts the challenge of combining various policy goals in the face of the national transformation agenda and heterogeneous local realities. As a consequence, the national policy framework addresses issues such as efficient budget use, environmental improvements, resource efficiency, and SME promotion and innovation strategies at the same time. It does so by providing straightforward guidance in form of public procurement lists. They specify not only the product's environmental characteristics but also the concrete producer. However, this also has downsides: for central authorities, it means a high workload evaluating products; companies offering products not included in the list are a priori excluded from certain tenders—even if their products may be advantageous in economic, environmental and social terms. Small and medium-sized enterprises may be overburdened with fulfilling the administrative requirements for being included in the lists; economic competitiveness can be restrained with lower incentives for innovation and efficiency gains as a result. Foreign products are per se excluded from the list. These structural challenges are hard to overcome, which will be further described in the subsection on central-local relations. On the operational level, the government reacted by increasing the update frequency of the lists. However, it is still limited to two rounds per year.

3.2. The urban level

The work in the three project cities reconfirmed the relevance of the urban level for analysing the Chinese political economy (Hurst, 2006) and related policy implementation. Particularly, when talking about prefecture-level cities with respective legislative and budgetary freedom, urban conditions can heavily influence social, environmental and economic realities. Overall development strategies and bureaucratic settings play into policy implementation.

In the case of SPP, the implementation capabilities of PPCs among other things further depend on their existing capacities, access to labour markets for skilled personnel, development of local product markets, public awareness and so forth. These aspects gain importance with increasing complexity of procurement tasks. SPP clearly is a complex procurement task as it is challenging to assess and measure sustainability. As a consequence, having procurement lists in place represents an important simplification for procurement officers in particular for those PPCs with limited capacities.

3.3. Central-local dynamics

Deriving policy recommendations from a project focusing on the urban level demands a closer look at central-local dynamics. Chinese cities—and also the SuPP-Urb project cities—differ with regard to fundamental features like climate, topography and structural path dependencies. However, local conditions for policy implementation mainly depend on government behaviour. In the period of reform and opening, vague central regulation leaves freedom to local government for fostering individual development strategies. At the same time, it puts pressure on them to come up with local regulation and procedures to face major challenges. Each government defines its own way to act within this framework. The result is a polymorphous local state with a variety of local government attitudes all over China (Baum & Shevchenko, 1999; Howell, 2006). Some local governments display a developmental attitude. They use discretionary power as an opportunity for swift policy implementation and enhancement of vague central regulation. However, in other cases local governments utilise freedom for discretion mostly for their personal advantage (Lu, 2000). Proper and comprehensive implementation of complex policies like SPP is hardly possible under such conditions.

For the centre it is hard to manage and monitor this diversity, in particular, because it goes along with geophysical and structural diversity. Reacting with a strict command-and-control system is not feasible for China for several reasons (Heilmann & Perry, 2011). For SPP, some local budgets might simply not allow for buying sustainable products and too stringent regulation might result in absolute non-compliance. Giving space for customisation and specification of vague central regulation can yield positive effects on compliance when stringency is locally appropriate. However, at the same time, local decisions on SPP can open the way for centrally undesired discretion: while rather objective criteria like price and quality still allow for central monitoring to a certain extent, sustainability is hard to measure in absence of clear indicators. Product lists are a very clear indicator and therefore part of the current solution to the principal-agent problem the central state faces. However, it is the question whether the benefits deriving from this strict instrument still outweigh its costs in terms of slow reaction to market trends and failure to pursue multiple goals like SME support, innovation and sustainability. Until local capacities in public procurement centres have widely increased and SPP regulations and standards at both national and local levels are well formulated and operational, the lists seem indispensable.

4. Potential Policy Approaches

This chapter identifies key policy recommendations stemming from the experience gained during the SuppUrb project. Recommendations also build on the analysis of the existing procurement system (chapter 2). They orient towards opportunities and challenges for SPP discussed above (chapter 3) and in further project publication by Nankai University (2011) and Philipps et al. (2011).

4.1. National procurement framework

A basic national procurement framework in China is already well established. However, given China's dynamic development, the framework needs further enhancement and refinement, in order to better support sustainable public procurement in the future. Building on experience from implementation activities, the framework could increasingly gain stringency; at the same time procurement personnel and (especially SME) suppliers need to be better supported.

In order to ensure a high environmental performance of publicly procured products:

1. In the short term the **quality and performance standard of environmental products in the lists needs to be improved**. According to external experts from civil society⁶, criteria for entering the lists have not been updated for several years. Against the backdrop of technical progress, this represents an effective lowering of standards compared to state-of-the-art solutions. Eliminating those products from the list that have a low environmental performance could increase the meaningfulness of the lists. At the same time, the **product range included in the purchasing lists needs to be widened** and more manufacturers should be included to improve competition⁷.
2. In the mid to long term, in order to widen the scope of environmentally friendly products, the government may assess ways for **moving beyond predefined product lists. A potential new design could include specifying only obligatory environmental characteristics or benchmarks**, but not concrete manufacturers. This could at the same time improve the economic performance of environmental products in the longer run due to increased competition. For such an indicator-based approach to be feasible, product information requirements would have to be adjusted accordingly to limit the burden for procurement personnel. Similarly, suppliers would need to be informed and SME suppliers may need to receive special support, i.e. in the run of specialised training schemes, to be able to fulfil the requirements. Of course, the existing environmental and energy efficiency label could be used as such an indicator set, but further improvement of performance levels and validation of the label could make a potential future SPP system even more effective.

⁶ An interview with a member of an international environmental NGO was conducted in March 2011. The interviewee prefers to remain anonymous.

⁷ This seems to be inconsistent with the demand for stricter selection. Therefore, such an approach can only work if combined with other means like capacity building among suppliers.

Continuous updates of environmental criteria could help to ensure high quality and incentivise environmental performance.

3. By making life cycle costing mandatory for all PPCs in China the cost efficiency barrier of green versus less environmentally friendly products could be revealed and put into perspective.
4. Environmental criteria could be weighted stronger in the selection criteria of PPCs to further expand the procurement of environmentally friendly products. Rules for purchasing departments could be further standardised to increase demand of sustainable products.

The incorporation of social criteria into SPP requirements could further advance SPP in China. To support the consideration of social criteria, the national government of China could conduct a feasibility study and demonstration projects on the incorporation of social criteria into public procurement. Another step could be the formulation of a Social Procurement Directive by the national government.

As supporting policies to the above recommendations a national capacity building programme appears highly recommendable. The capacity building programme could include the following elements:

- A national capacity building (and awareness raising) programme for PPCs and EPBs on life cycle costing, technical aspects of SPP tendering, information management, product assessment and social criteria.
- A nationally framed capacity building programme for SMEs on environmental performance, environmental management systems and life cycle analysis. This component would be in line with Article 9, GPL, which explicitly states that public procurement should support SME development. National government could set the framework and mandate local governments to implement the SME training. Funding would probably have to be provided by both national and local governments.
- An information and exchange platform on the evaluation and experience with procured products that would give PPCs the space for mutual learning and exchange of experience. Information on environmentally friendly products should be provided on the platform, including their technical specifications. The platform could also include a comparison (e.g. by establishing national and/or provincial SPP benchmarking systems) of PPC performance to facilitate peer-to-peer comparisons and create incentives for PPCs to improve their performance. However, evaluation should take developmental differences into account.

4.2. Urban level

Market conditions, environmental awareness and capacities of PPC personnel vary greatly between different cities and regions. Therefore, the following recommendations may be more relevant in some cities than in others.

1. At the municipal level all PPCs should use life cycle costing to assess the economic performance of products and thereby reduce the cost-advantage of less environmentally friendly products.

In order for PPCs to be able to do so, capacity building will be necessary in most PPCs, albeit to different extents.

2. In addition to the national SPP institutional capacity building programme involving municipal PPCs, municipal financial bureaus could also allocate an extra budget to PPCs for the implementation of PPC internal capacity building measures.
3. In regions, where environmental awareness remains low, information and awareness raising campaigns can help improve the acceptance of SPP policies and increase demand of sustainable products by government purchasers. Encouraging and supporting suppliers to undertake life cycle assessments of their products could lead to additional improvements in the field of sustainable consumption and production and SPP policy implementation.
4. Rewarding procurement officers within user institutions for purchasing equipment with low operational costs could be a good incentive for SPP implementation. Nowadays, this is often not the case: if the facility manager of a school agrees with the PPC to purchase energy-efficient equipment, low operational costs will most likely not have any positive influence on his performance evaluation while high purchasing costs might have a negative effect. Here, human resource management and budget planning can set effective incentives for cooperation between users and the respective PPC.

4.3. Central-local architecture

The success of the above policy recommendations depends on their compatibility with the central-local governance system presented in chapter three. Hence, considering this context of central-local hierarchy might make any approach more successful. Thereby, it could set stringent standards and promote SPP but remain flexible enough to take local realities into account.

1. The current purchasing lists are one approach to this balancing act. A strong capacity building campaign appears vital with regard to overcoming limitations brought about by this approach, such as competition issues, discrimination against SMEs and more backward suppliers in less developed areas. Only once local capacity has been built will it be possible to successfully enforce a more flexible approach that subsequently gives higher responsibility to local PPC personnel.
2. The above-mentioned information and exchange platform could further support and accelerate learning at the local level.
3. In addition, a national monitoring and evaluation system could provide both incentives to perform SPP and a control mechanism against corruption. Monitoring would be based on spot checks to keep the administrative burden as low as possible. This, too, however requires highly trained monitoring personnel.

5. Conclusions

The SuPP-Urb Project showed that local state action on sustainable public procurement (SPP) can make a difference by improving sustainable consumption and production in the markets (Philipps et al., 2011). For the successful integration of social and ecological criteria in the procurement process and widespread implementation thereof, an adequate policy framework is of utmost importance. Based on the practical experiences gained in the SuPP-Urb project, potential policy approaches for the enhancement of the national and local regulatory framework of SPP in urban China were developed.

Project experience and analysis revealed that China already possesses a well-established legal and regulatory framework for SPP. In comparison to other countries, SPP is already quite advanced in China. An important aspect in this regard is the top-down structure of the regulatory system. The Chinese public procurement system can be described as a hierarchical and centralised multi-level system, which enables an efficient and direct transfer of directives to local and regional levels of governance. A centralised system helps to bundle expertise and capacity in public procurement centres and allows for economies of scale in the way of cost-efficient bulk purchasing that lowers transaction costs and allows for lower prices. This is particularly relevant for SPP, because related product information systems and selection processes are rather complex and demanding.

The status quo provides a promising basis for the further enhancement of the public procurement system and in particular for the fostering of SPP. However, as China develops rapidly, the well-established national procurement system needs further enhancement in order to fully realise its potential in regard to SPP.

In particular, it is necessary to formulate an integrated policy package, which takes the multiple levels of SPP governance into account and which offers standards for the translation of national directives into practical use-oriented guidelines. An important measure in this context is the provision of capacity building measures. In addition to the suggested national SPP capacity building programme, in which municipal PPCs should be intensely involved, PPC internal capacity building measures should also be implemented and funded by local financial bureaus.

At present, green purchasing product lists are the major policy instrument for fostering SPP. These lists provided an adequate way of introducing green criteria into the public procurement system and provide important leverage for SPP. The current limitations of the lists (mainly a limited scope and relatively low standards) might however impair the future success of SPP. Therefore the quality and performance standard of the lists should be improved and gradually substituted by a comprehensive catalogue of green criteria—instead of green products.

Lastly, at the time of writing, most of the effective laws and regulations on SPP in China solely focus on the incorporation of environmental criteria in the public procurement process. In order to exploit the full potential of SPP social criteria should also be considered. As a first step towards the incorporation of social criteria in SPP a forerunner approach could be initialised, whereby advanced cities launch pilot projects and channel their experiences into a central

platform for knowledge exchange. Eventually and building on the experiences gained in pilot projects, national government might formulate a Social Procurement Directive.

Building on the existing capacities and experiences gained in the pilot projects, government has the opportunity to formulate a holistic policy strategy to make China's domestic markets more sustainable by generating a pull for sustainably produced products and, ultimately, more sustainable consumption.

6. Literature and suggested further reading

- Baum, R., & Shevchenko, A. (1999). The “State of the State.” In M. Goldman & R. MacFarquhar (Eds.), *The paradox of China’s post-Mao reforms* (pp. 333-362). Harvard University Press.
- EUCCC. (2011). *Public Procurement Study: European Business Experiences Competing for Public Contracts in China*. European Chamber of Commerce in China.
- Geng, Y., & Doberstein, B. (2008). Greening government procurement in developing countries: Building capacity in China. *Journal of environmental management*, 88(4), 932–938.
- Heilmann, S., & Perry, E. J. (Eds.). (2011). *Mao’s Invisible Hand: The Political Foundations of Adaptive Governance in China*. Harvard University Press.
- Howell, J. (2006). Reflections on the Chinese state. *Development and Change*, 37(2), 273–297.
- Hurst, W. (2006). The City as the Focus: The Analysis of Contemporary Chinese Urban Politics. *China Information*, 20(3), 457-479.
- Lieberthal, K., & Lampton, D. M. (1992). *Bureaucracy, politics, and decision making in post-Mao China*. Berkeley: University of California Press.
- Liu, C., & Li, T. (2006). Chinese Government procurement policy for energy-efficient products. In P. Bertoldi, B. Kiss, & B. Atanasiu (Eds.), *Energy Efficiency in Domestic Appliances and Lighting* (Vol. 1, pp. 147-152). Presented at the 4th International Conference EEDAL’06. Retrieved from <http://energyefficiency.jrc.cec.eu.int>
- Lu, X. (2000). Booty Socialism, Bureau-Preneurs, and the State in Transition: Organizational Corruption in China. *Comparative Politics*, 32(3), 273-294.
- Lundvall, B.-Å. (Ed.). (2010). *National Systems of Innovation: Toward a Theory of Innovation and Interactive Learning*. Anthem Press.
- MEP, & MOF (Eds.). (2011). 环境标志产品政府采购清单（第七期）. Ministry of Environmental Protection, Ministry of Finance.
- Nankai University (Ed.). (2011) *Challenges and Opportunities for Sustainable Public Procurement in China*. SuPP-Urb-China Paper No. 13_EN, Wuppertal Institute: Wuppertal.
- NDRC, & MOF. (2011). 节能产品政府采购清单（第十期）. National Development and Reform Commission, Ministry of Finance.
- Philipps, S., Marsille, C., Schröder, P., & Haberland, T. (2011). *Sustainable Public Procurement in Urban China. How the Government as Consumer Can Drive Sustainable Consumption and Production*. SuPP-Urb Project Publications. Wuppertal.
- PRC. (1999). 中华人民共和国招标投标法. Retrieved August 20, 2011, from http://www.ccgp.gov.cn/zycg/zcfg/201009/t20100929_1167545.shtml.
- PRC. (2002a). 中华人民共和国政府采购法. Retrieved August 20, 2011, a from http://www.ccgp.gov.cn/zycg/zcfg/201009/t20100929_1167558.shtml.
- PRC. (2002b, June 29). The Government Procurement Law of the People’s Republic of China (Order of the President No.68). Retrieved January 26, 2011, b from http://www.gov.cn/english/laws/2005-10/08/content_75023.htm.